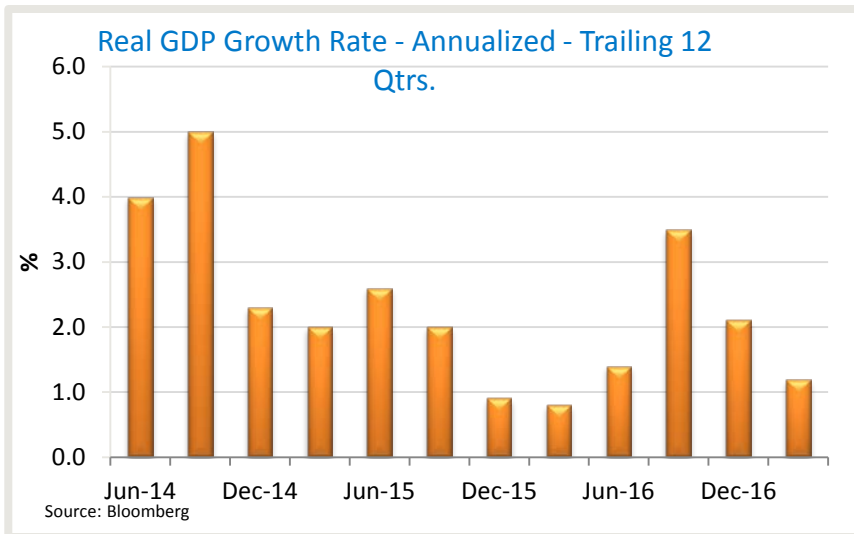


# Weekly Market Review

May 26, 2017

## Chart of the Week



## Weekly Highlights

- **Domestic stocks were up for the week** after upbeat retail sales brought the S&P 500 to near record highs.
- **Developed markets were flat for the week**, although emerging markets posted positive gains after last week's higher volatility.
- **U.S. Treasury yields were flat for the week**, increasing by 4 basis points midweek before declining again.
- **Commodity indexes were down for the week**, with the sell-off in oil driving the majority of negative returns.

## Talking Points

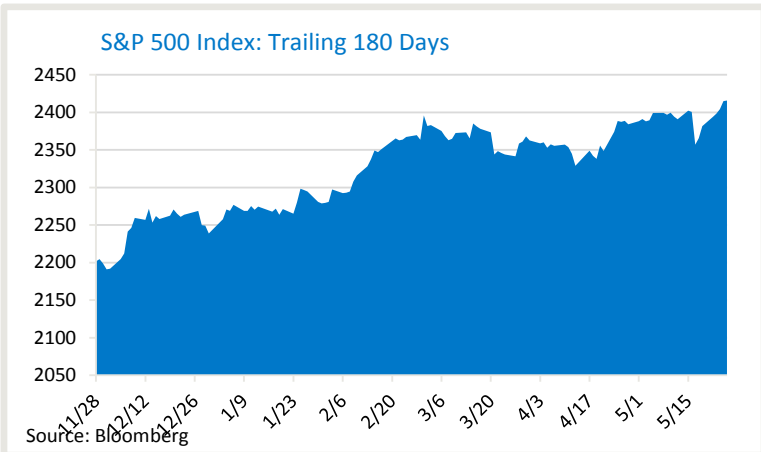
- **Among equities**, small caps slightly underperformed large caps; growth stocks slightly outperformed value-oriented equities; domestic stocks outperformed international equities; developed markets underperformed emerging markets stocks.
- **Treasury yields remained flat for the week.**
- **Commodity indexes were down**, as the market was disappointed regarding the extent of OPEC's oil production cut.
- **The dollar index rose slightly this week** against a basket of six major currencies.
- **Among economic data released this week**, new and existing home sales disappointed, jobless claims were in line, and GDP was revised up from a median forecast of 0.9% to 1.2%.

## Market Dashboard

	Last Price	Change	% Chg.	YTD %
<b>S&amp;P 500</b>	2,415.82	34.09	1.43%	7.9%
<b>Dow Industrials</b>	21,080.28	275.44	1.32%	6.7%
<b>Nasdaq</b>	6,210.20	126.49	2.08%	15.4%
<b>Russell 2000</b>	1,382.24	14.91	1.09%	1.9%
<b>Euro Stoxx Index</b>	391.35	-0.16	-0.04%	8.3%
<b>Shanghai Composite</b>	3,110.06	19.43	0.63%	0.2%
<b>Russell Global</b>	1,937.98	21.40	1.12%	10.0%

Source: Bloomberg; Index % change is based on price.

	Last Price	Change	% Chg.	YTD %
<b>Russell Global EM</b>	3,196.76	52.42	1.67%	17.0%
<b>10-Year US Treas.</b>	2.25	0 bps	NM	NM
<b>DJ UBS Comm. Idx.</b>	84.01	-0.71	-0.84%	-4.0%
<b>Gold</b>	\$1,267.30	\$11.08	0.88%	10.4%
<b>Crude Oil</b>	\$49.76	-\$0.89	-1.76%	-12.3%
<b>Dollar Index</b>	97.44	0.30	0.30%	-4.7%
<b>VIX Index</b>	9.81	-2.23	-18.52%	-30.1%



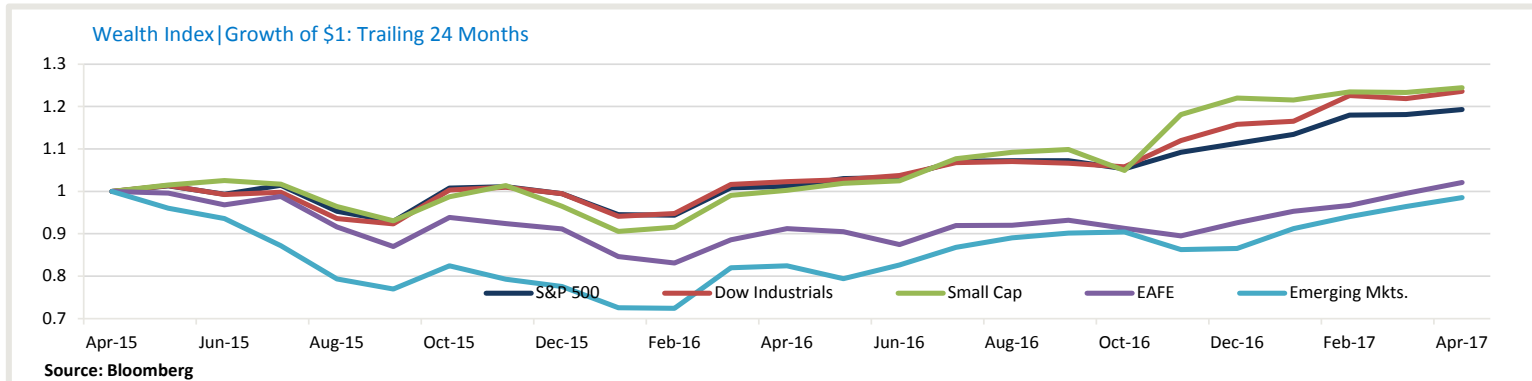
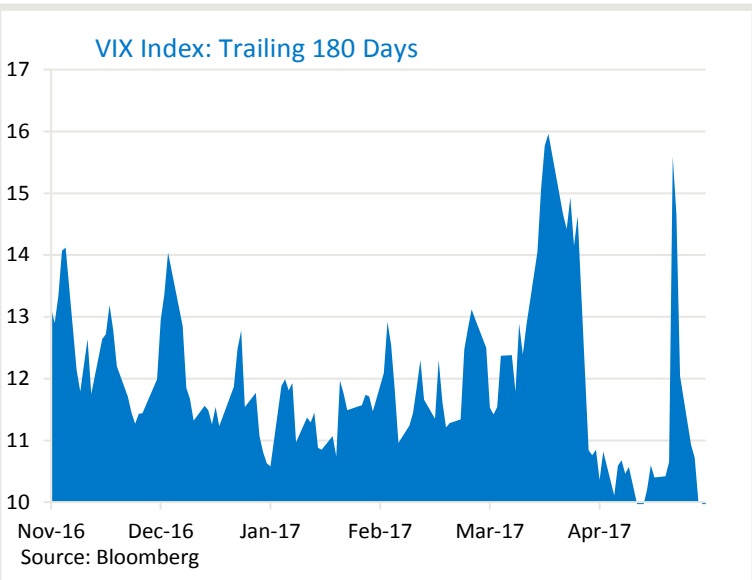
	One Week			YTD		
	Value	Growth		Value	Growth	
<b>L</b>	0.85%	1.51%	2.09%	2.02%	8.36%	14.52%
	0.95%	1.13%	1.35%	3.07%	6.41%	10.63%
<b>S</b>	0.86%	1.09%	1.33%	-2.51%	1.85%	6.71%

Source: Bloomberg

**Sector Performance:**  
**S&P/Global Industry Classification Sectors (GICS)**

	% Wgt in S&P 500	Week % Chg.	YTD % Chg.
<b>Consumer Discretionary</b>	12.4	1.74%	11.4%
<b>Consumer Staples</b>	9.4	2.22%	9.1%
<b>Energy</b>	6.1	-2.14%	-12.1%
<b>Financials</b>	13.9	1.25%	1.3%
<b>Health Care</b>	13.8	1.07%	9.8%
<b>Industrials</b>	10.1	1.68%	7.0%
<b>Information Technology</b>	23.1	2.32%	19.7%
<b>Materials</b>	2.8	0.97%	6.2%
<b>Real Estate</b>	2.9	0.70%	3.6%
<b>Telecom Services</b>	2.2	-0.27%	-11.7%
<b>Utilities</b>	3.2	2.48%	9.2%

Source: Bloomberg



## The Economy and Markets

### ***A Macro View: Housing – Back to the Top but for a Different Reason***

Housing prices continue to climb and are less than 5% below peak prices in 2006, according to the S&P/Case-Shiller 20 City Composite Home Price Index. Those who either cannot afford or find a home in the next year or two might be disappointed in the short run, but given the strong price appreciation, they might be grateful in the long run. Remember that those who purchased a home at the peak in 2006 are still under water. In 2006, the reason for the large increase in housing prices was sub-prime lending, where anyone willing to sign a mortgage while providing no documentation to their lender could walk away with a set of keys. The mortgages were packaged by Wall Street and sold to investors around the world. When mortgages couldn't be generated fast enough, tranches were then re-packaged and credit default swaps were written on re-packaged tranches. Anyone could own a home they couldn't afford as long as the machine kept churning out re-packaged mortgages. But eventually it all came crashing down. Although the reason for today's rising home prices is different, potential home buyers in today's market should remember Mark Twain's saying that "history does not repeat itself, but it does rhyme."

On the surface, the good news for today's buyers is that despite prices reaching near 2006 levels, the ratio of house price to income is still 18% below 2006's peak. In other words, housing prices might be near the top, but income levels have increased since 2006, so the average buyer has more income to spend on a home. That said, the price-to-income ratio is 8% higher than its average since 1980, according to *The Economist*. The bad news is the average price-to-income ratio since 1980 is distorted by the 2005-2006 bubble, so if you exclude that bubble, people are paying much more for a house compared to their income level.

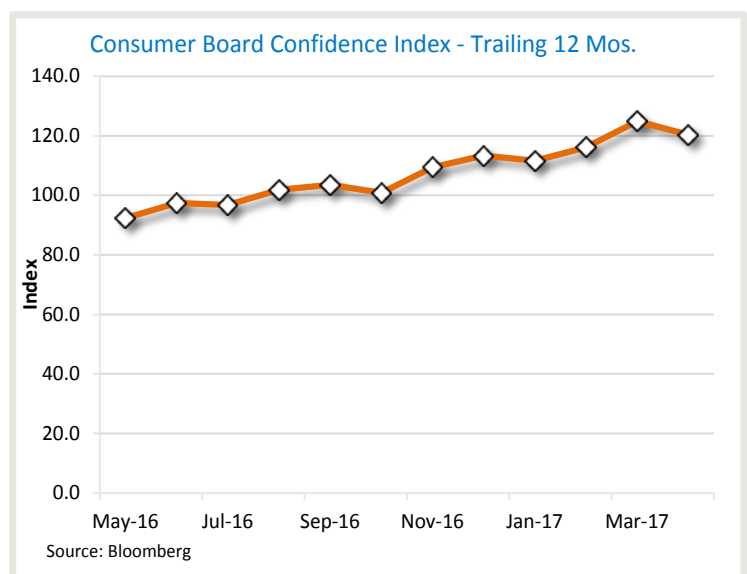
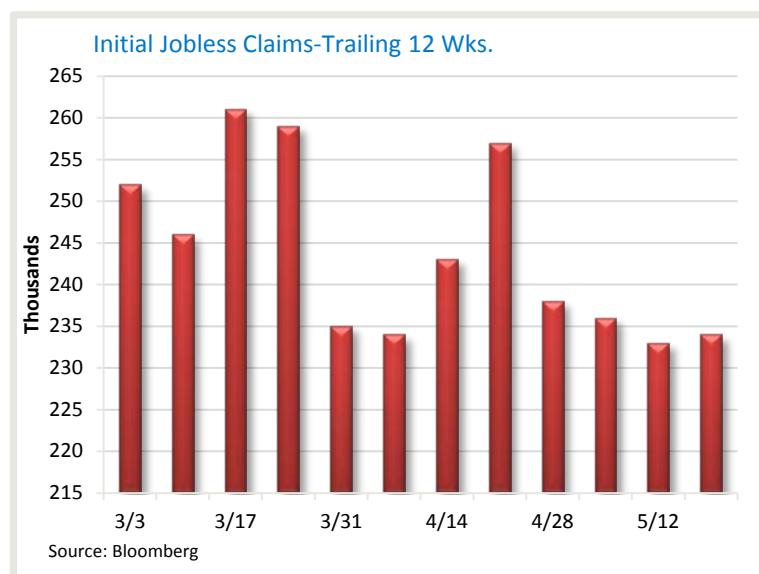
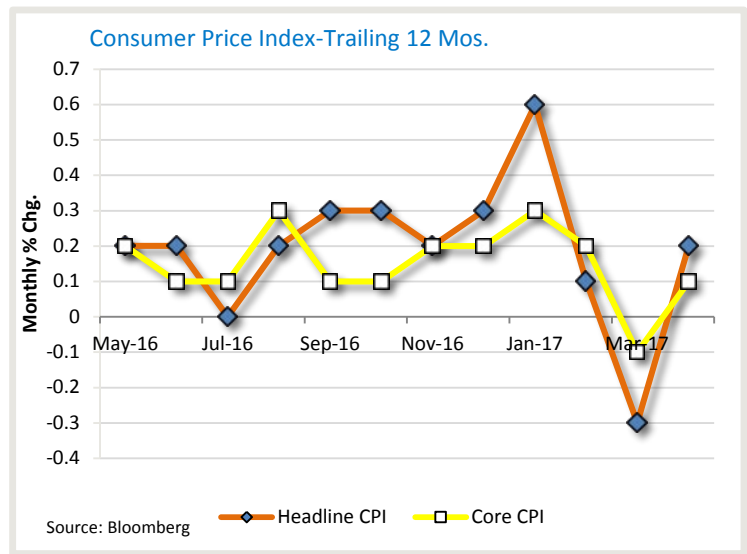
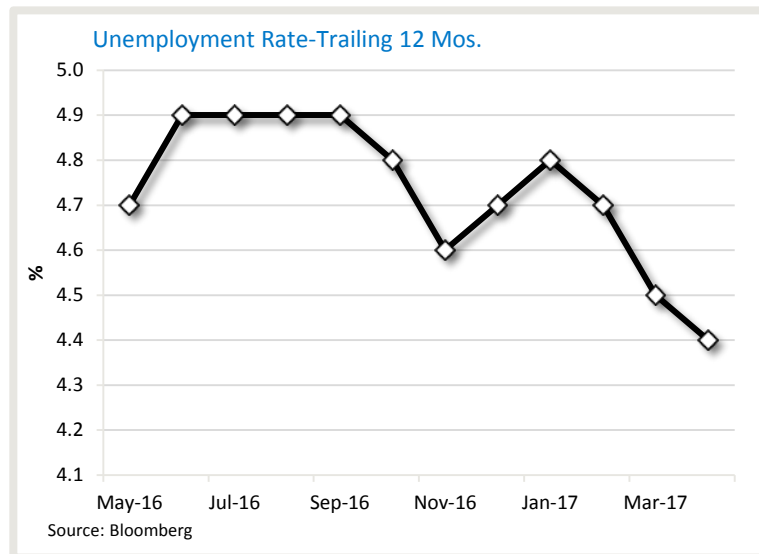
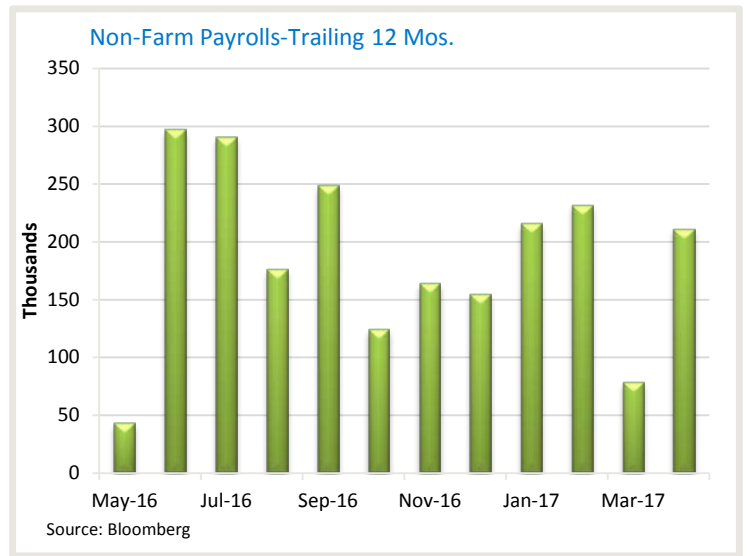
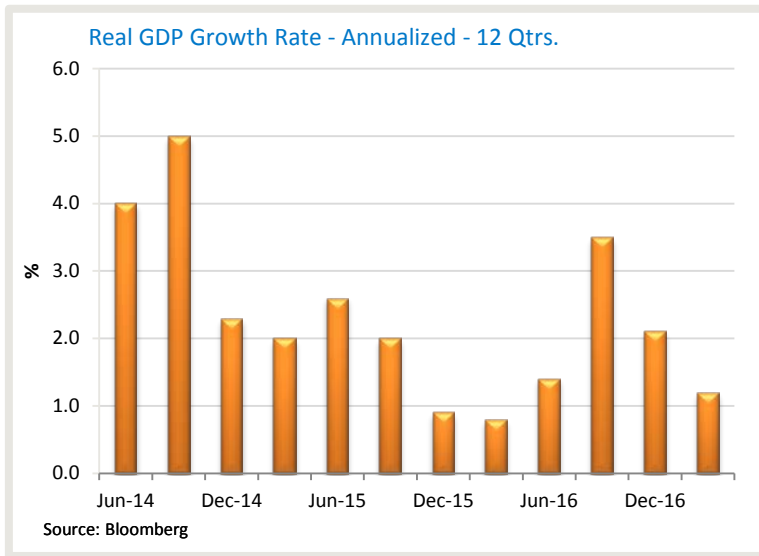
The reason for such a spike in housing prices has less to do with cheap and widely available credit, as was the case in 2005-2006, and more to do with low supply and an influx of central bank liquidity. Over the past several years, mortgage rates have dipped to historic lows, so home buyers who qualify for a mortgage pay less in monthly payments for the dollars borrowed than in the 2000s, 1990s, and 1980s. Given such cheap rates, future home buyers can purchase a more expensive home per dollar in mortgage payment, compared to the last 30 years. According to the St. Louis Federal Reserve Bank, the average mortgage rate on a 30-year conforming loan in 2005 was 5.87%, compared to 2016's average rate of 3.65%. This amounts to a monthly savings of \$134 per \$100,000 in mortgage loan. In other words, buyers can get a much more expensive house for their average monthly payment, which drives up housing prices.

The second reason for rising home prices is the lack of supply. Since 1980, average housing starts as a percentage of the US population have been 0.51%, according to the Federal Reserve. But since the housing bubble burst in 2006, average housing starts are 0.29%—almost half. So America is building fewer homes per person, depressing the supply of new homes added to the market. According to *The Wall Street Journal*, home inventory is at a 20-year low and keeps decreasing. For the past 23 consecutive months, supply has decreased each month, so now there are fewer homes for sale, resulting in an increase in prices.

What does all this mean for the housing market? For one thing, it appears we may be approaching stretched valuation territory, although it might not be similar to 2006 levels. In 2006, anyone could buy a home as long as they were willing to sign on the dotted line and lie about their income, resulting in a rapid increase of defaults once the actual mortgage payment came due. In today's market, a combination of lack of supply and low rates is fueling the increase in housing prices. The question is, what would cause today's housing market to burst? An increase in rates could reduce the amount people can spend on a house, which should cause prices to cool, or builders could add to the supply. Either one of these events could happen quickly, as rate increases are already priced into the market, and the turnaround time to build a new house is less than a year. Also, last year home builders built 30% more homes than they have averaged since the housing crisis, so the trend for an increase in supply is rising. Future home buyers need to be aware of this issue, as things could change rapidly in less than a year's time, just like they did in 2006. In other words, future home buyers should brush up on their Latin: *caveat emptor*.

*Ken Shaw, CFA*  
*SVP, Senior Investment Analyst, Investment Research*

## Economic Data



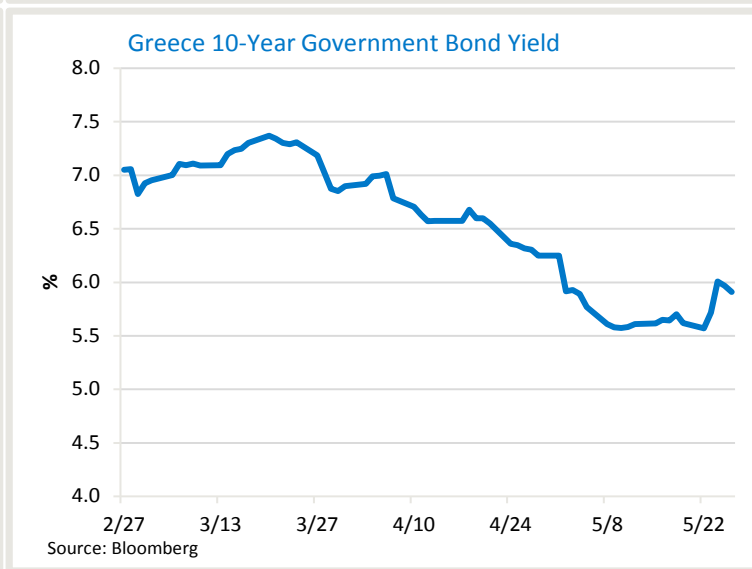
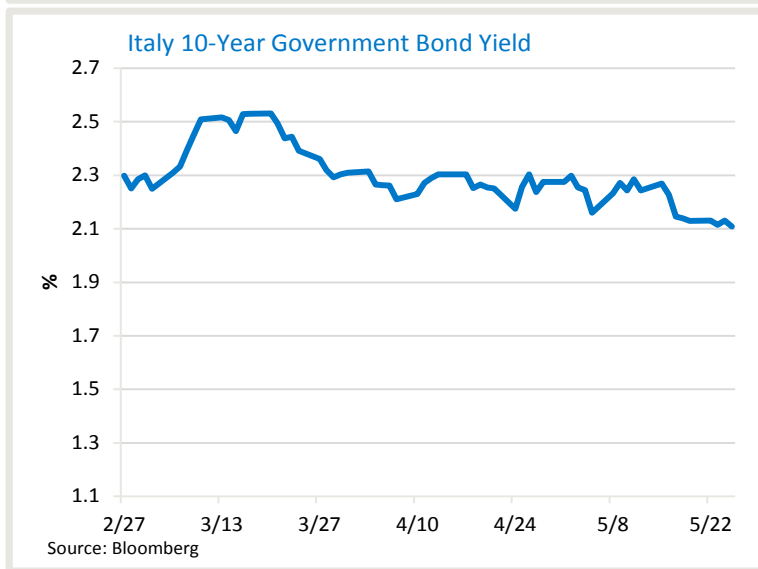
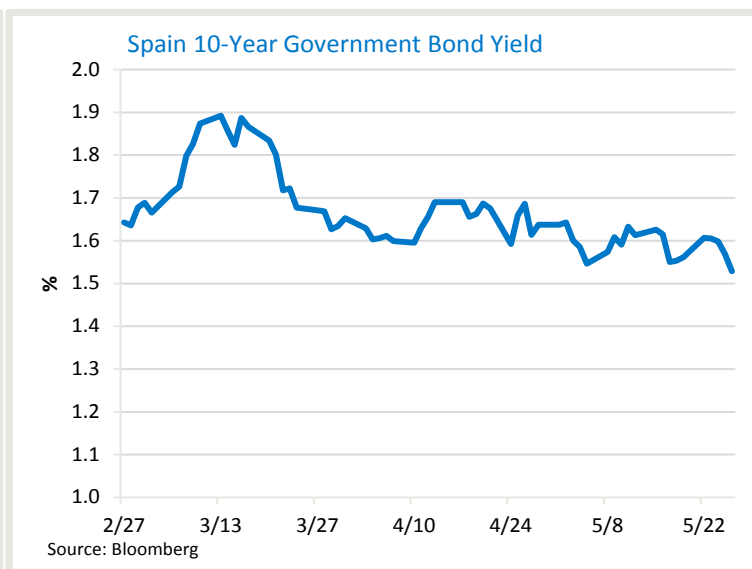
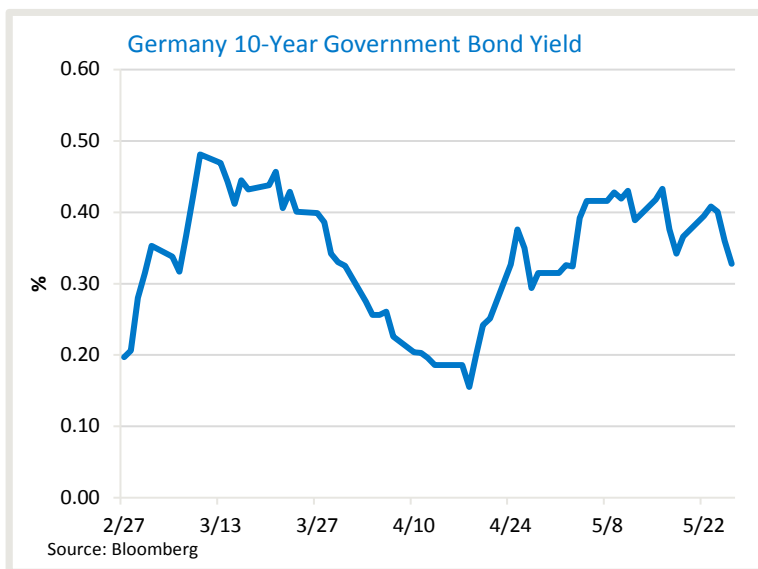
## Eurozone

### SELECTED EUROPEAN SOVEREIGN YIELD PERFORMANCE

	Last	Change	% Chg.	YTD %
Germany 10-Yr. Govt.	0.33	4 bps	NM	NM
Greece 10-Yr. Govt.	5.91	-19 bps	NM	NM
Italy 10-Yr. Govt.	2.09	3 bps	NM	NM
Spain 10-Yr. Govt.	1.53	3 bps	NM	NM
Belgium 10-Yr. Govt.	0.68	7 bps	NM	NM

	Last	Change	% Chg.	YTD %
France 10-Yr. Govt.	0.75	5 bps	NM	NM
Ireland 10-Yr. Govt.	0.77	4 bps	NM	NM
Portugal 10-Yr. Govt.	3.13	3 bps	NM	NM
Netherlands 10-Yr. Govt.	0.54	3 bps	NM	NM
U.K. 10-Yr. Govt.	1.01	9 bps	NM	NM

Source: Bloomberg  
Basis points (bps)

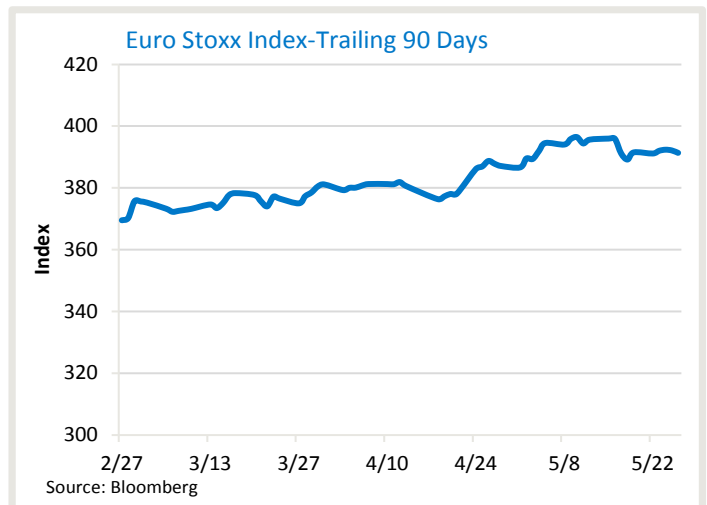
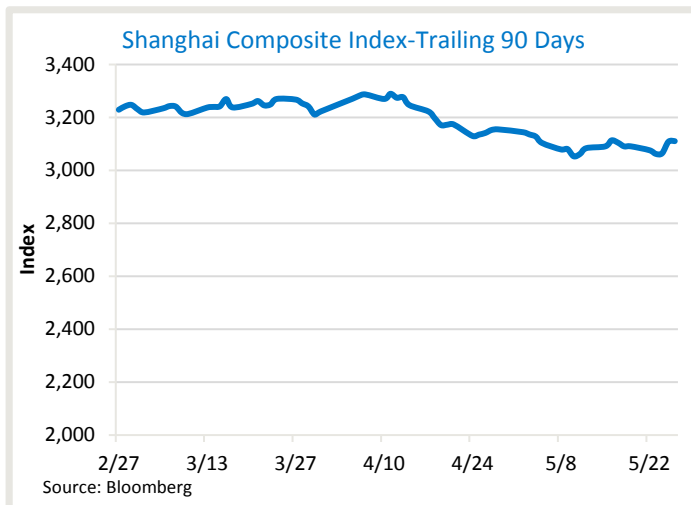
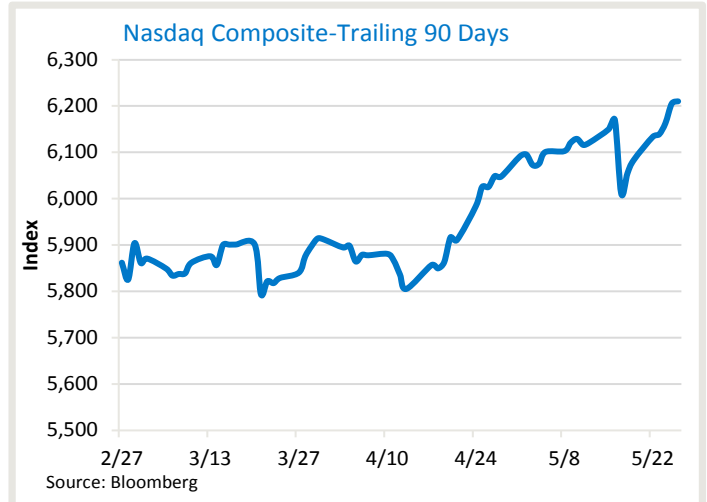
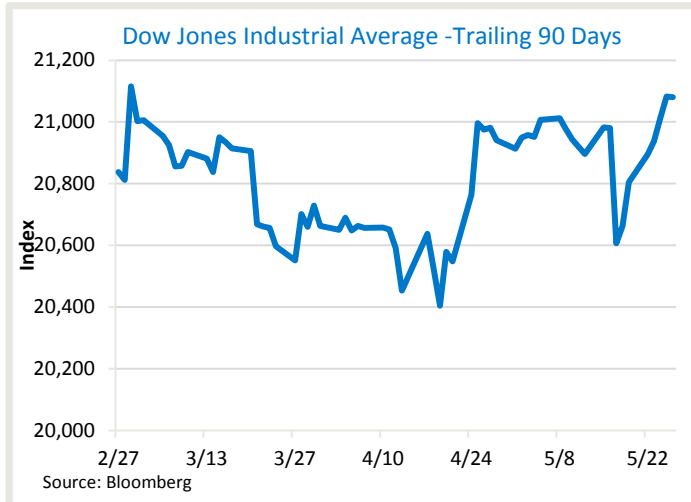


## Equities

### WORLD MARKET PERFORMANCE

	Last	Change	% Chg.	YTD %		Last	Change	% Chg.	YTD %
<b>S&amp;P 500</b>	<b>2,415.82</b>	<b>34.09</b>	<b>1.43%</b>	<b>7.91%</b>	<b>Swiss Market Index</b>	<b>9,042.03</b>	<b>19.52</b>	<b>0.22%</b>	<b>10.00%</b>
<b>Dow Industrials</b>	<b>21,080.28</b>	<b>275.44</b>	<b>1.32%</b>	<b>6.67%</b>	<b>CAC 40 Index (France)</b>	<b>5,336.64</b>	<b>12.24</b>	<b>0.23%</b>	<b>9.76%</b>
<b>Nasdaq Composite</b>	<b>6,210.20</b>	<b>126.49</b>	<b>2.08%</b>	<b>15.36%</b>	<b>DAX Index (Germany)</b>	<b>12,602.18</b>	<b>-36.51</b>	<b>-0.29%</b>	<b>9.76%</b>
<b>Russell Global</b>	<b>1,937.98</b>	<b>21.40</b>	<b>1.12%</b>	<b>10.0%</b>	<b>Irish Overall Index</b>	<b>6,973.83</b>	<b>43.07</b>	<b>0.62%</b>	<b>7.01%</b>
<b>Russell Global EM</b>	<b>3,196.76</b>	<b>52.42</b>	<b>1.67%</b>	<b>17.0%</b>	<b>Nikkei 225</b>	<b>19,686.84</b>	<b>96.08</b>	<b>0.49%</b>	<b>2.99%</b>
<b>S&amp;P/TSX (Canada)</b>	<b>15,416.93</b>	<b>-41.53</b>	<b>-0.27%</b>	<b>0.85%</b>	<b>Hang Seng Index</b>	<b>25,639.27</b>	<b>464.40</b>	<b>1.84%</b>	<b>16.54%</b>
<b>Mexico IPC</b>	<b>49,688.27</b>	<b>620.80</b>	<b>1.27%</b>	<b>8.86%</b>	<b>Shanghai Composite</b>	<b>3,110.06</b>	<b>19.43</b>	<b>0.63%</b>	<b>0.21%</b>
<b>Brazil Bovespa</b>	<b>64,085.41</b>	<b>1446.10</b>	<b>2.31%</b>	<b>6.41%</b>	<b>Kospi Index (S. Korea)</b>	<b>2,355.30</b>	<b>66.82</b>	<b>2.92%</b>	<b>16.23%</b>
<b>Euro Stoxx 600</b>	<b>391.35</b>	<b>-0.16</b>	<b>-0.04%</b>	<b>8.28%</b>	<b>Taiwan Taiex Index</b>	<b>10,101.95</b>	<b>154.33</b>	<b>1.55%</b>	<b>9.17%</b>
<b>FTSE 100</b>	<b>7,547.63</b>	<b>76.92</b>	<b>1.03%</b>	<b>5.67%</b>	<b>Tel Aviv 25 Index</b>	<b>1,423.35</b>	<b>11.16</b>	<b>0.79%</b>	<b>-3.22%</b>
<b>IBEX 35 (Spain)</b>	<b>10,904.20</b>	<b>68.80</b>	<b>0.63%</b>	<b>16.60%</b>	<b>MICEX Index (Russia)</b>	<b>1,934.25</b>	<b>-28.15</b>	<b>-1.43%</b>	<b>-13.37%</b>

Source: Bloomberg; Index % change is based on price.



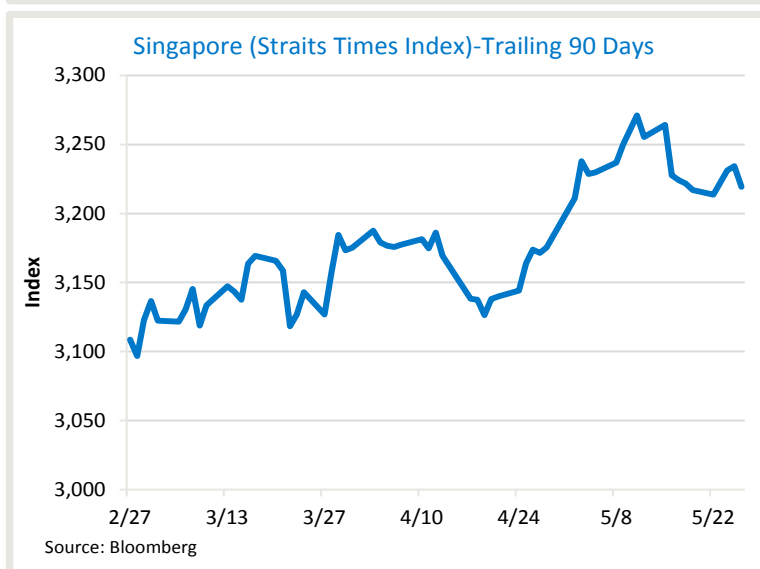
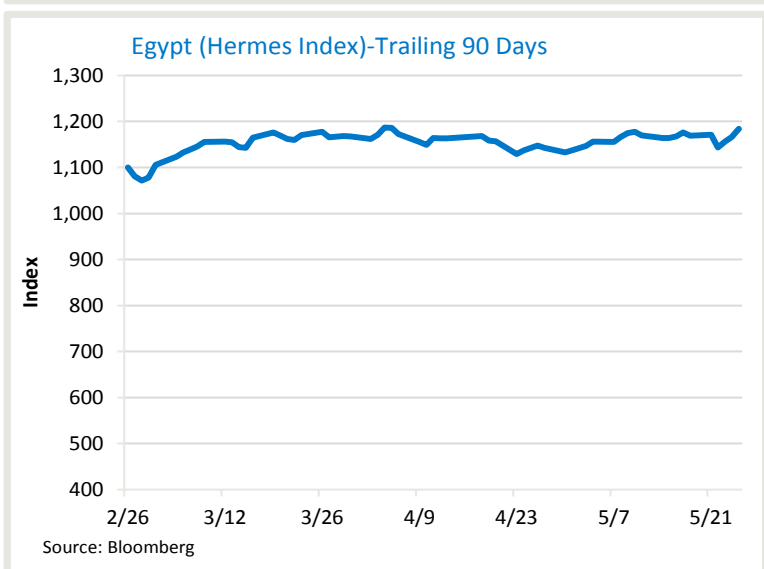
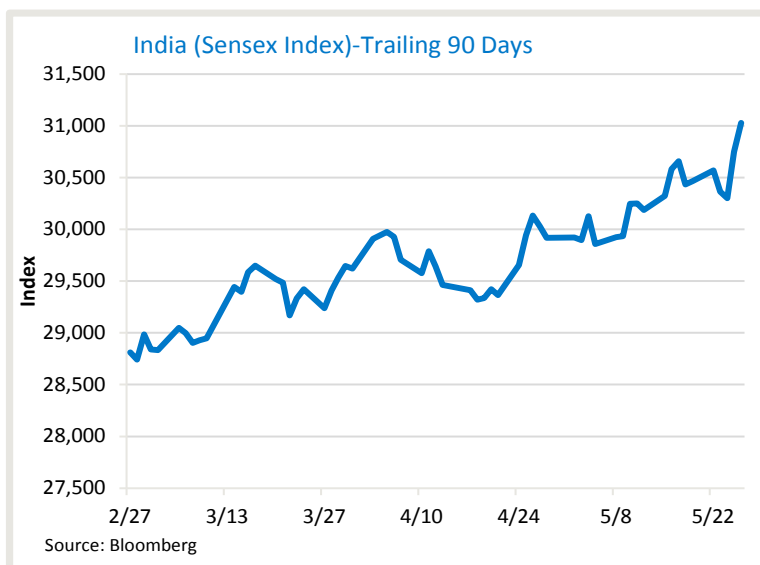
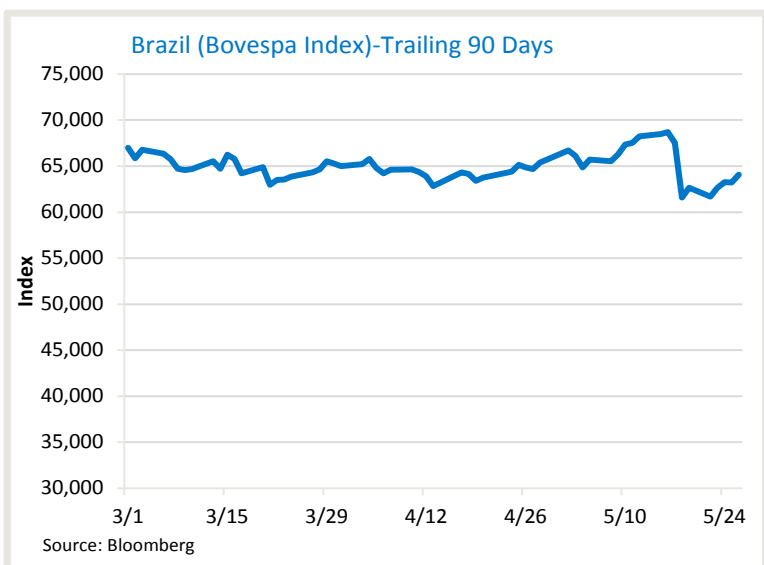
## Equities – Emerging and Frontier Markets

### EMERGING AND FRONTIER MARKET PERFORMANCE

	Last	Change	% Chg.	YTD %
Mexico IPC	49,688.27	620.80	1.3%	8.9%
Brazil (Bovespa Index)	64,085.41	1446.10	2.3%	6.4%
MICEX Index (Russia)	1,934.25	-28.15	-1.4%	-13.4%
Czech Republic (Prague)	1,016.24	-3.89	-0.4%	10.3%
Turkey (Istanbul)	97,533.28	2385.94	2.5%	24.8%
Egypt (Hermes Index)	1,184.30	15.07	1.3%	8.8%
Kenya (Nairobi 20 Index)	3,442.38	156.89	4.8%	8.0%
Saudi Arabia (TASI Index)	6,871.72	-66.38	-1.0%	-4.7%
Lebanon (Beirut BLOM Index)	1,155.86	-3.44	-0.3%	-4.6%
Palestine	529.15	3.35	0.6%	-0.2%

Source: Bloomberg; Index % change is based on price.

	Last	Change	% Chg.	YTD %
Hang Seng Index	25,639.27	464.40	1.8%	16.5%
India (Sensex 30)	31,028.21	563.29	1.8%	16.5%
Malaysia (KLCI Index)	1,772.30	4.02	0.2%	8.0%
Singapore (Straits Times Index)	3,219.42	2.50	0.1%	11.8%
Thailand (SET Index)	1,569.27	19.63	1.3%	1.7%
Indonesia (Jakarta)	5,716.82	71.36	1.3%	7.9%
Pakistan (Karachi KSE 100)	52,636.87	1894.84	3.7%	10.1%
Vietnam (Ho Chi Minh)	743.41	9.59	1.3%	11.8%
Sri Lanka (Colombo)	6,697.86	-31.80	-0.5%	7.5%
Cambodia (Laos)	1,009.50	-7.38	-0.7%	-0.5%

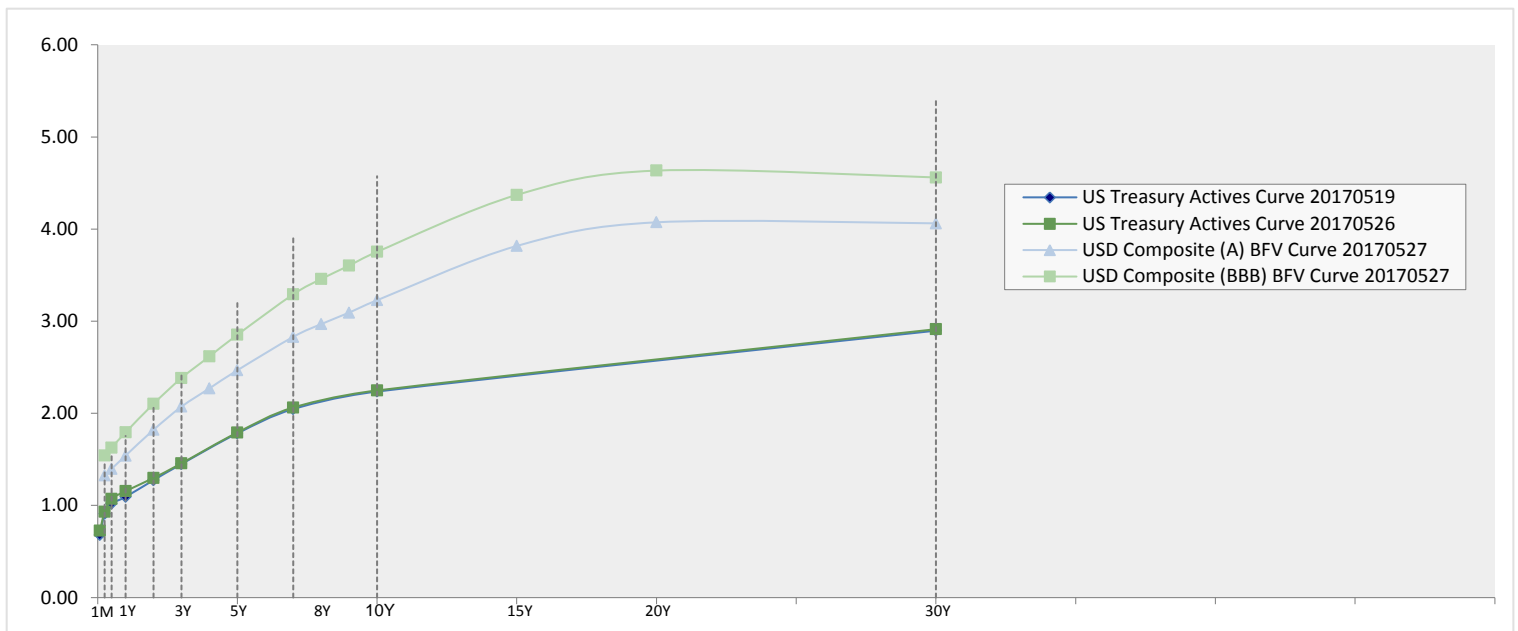


## Interest Rates

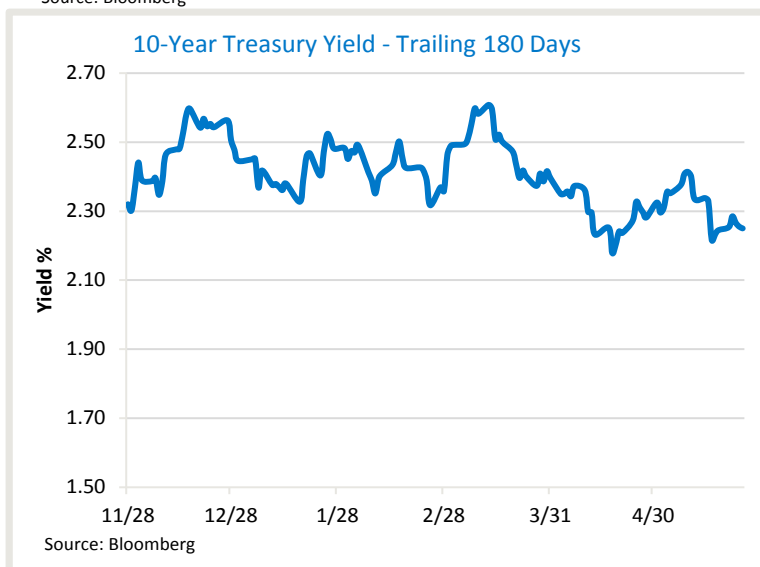
### SELECTED INTEREST RATES

	Last	Change	% Chg.	YTD %		Last	Change	% Chg.	YTD %
2-Yr. U.S. Treasury	1.30%	0 bps	NM	NM	Prime Rate	4.00%	0.00	NM	NM
5-Yr. U.S. Treasury	1.79%	0 bps	NM	NM	Fed Funds Rate	1.00%	0.00	NM	NM
10-Yr. U.S. Treasury	2.25%	0 bps	NM	NM	Discount Rate	1.50%	0.00	NM	NM
30-Yr. U.S. Treasury	2.92%	1 bps	NM	NM	LIBOR (3 Mo.)	1.20%	1 bps	NM	NM
German 10-Yr. Govt.	0.33%	4 bps	NM	NM	Bond Buyer 40 Muni	3.70%	-6 bps	NM	NM
France 10-Yr.	0.75%	5 bps	NM	NM	Bond Buyer 40 G.O.	3.69%	NA	NM	NM
Italy 10-Yr.	2.09%	3 bps	NM	NM	Bond Buyer 40 Rev.	3.87%	NA	NM	NM
Fed 5-Yr Fwd BE Inf.	1.88%	-4 bps	NM	NM					

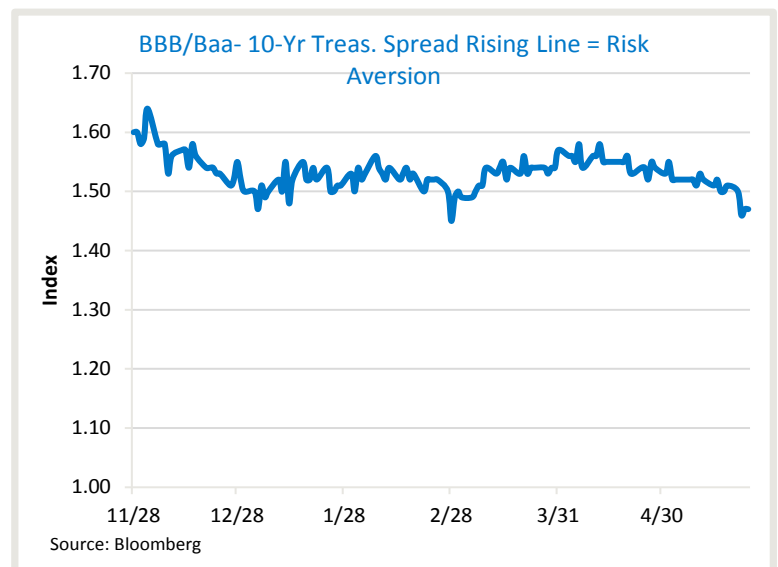
Source: Bloomberg



Source: Bloomberg



Source: Bloomberg



Source: Bloomberg



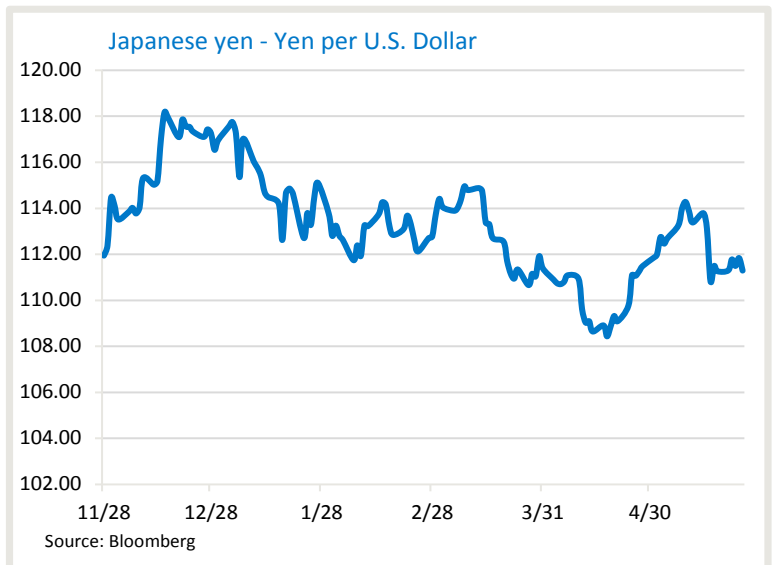
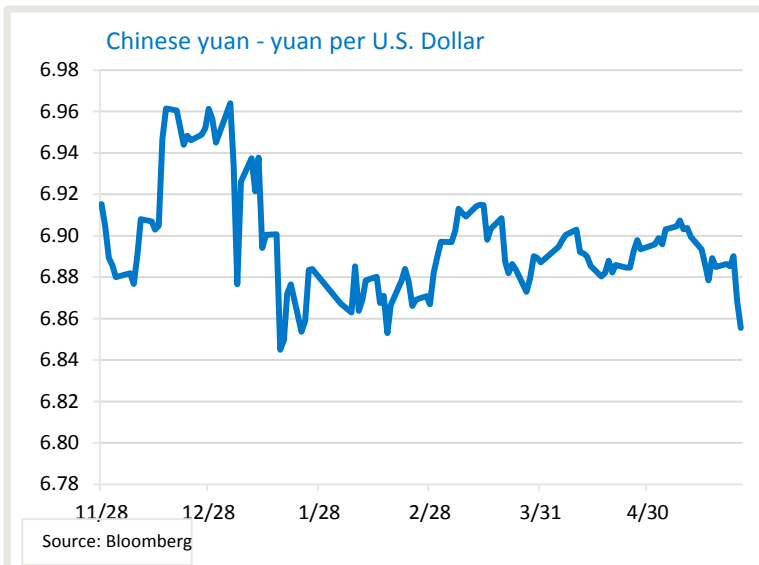
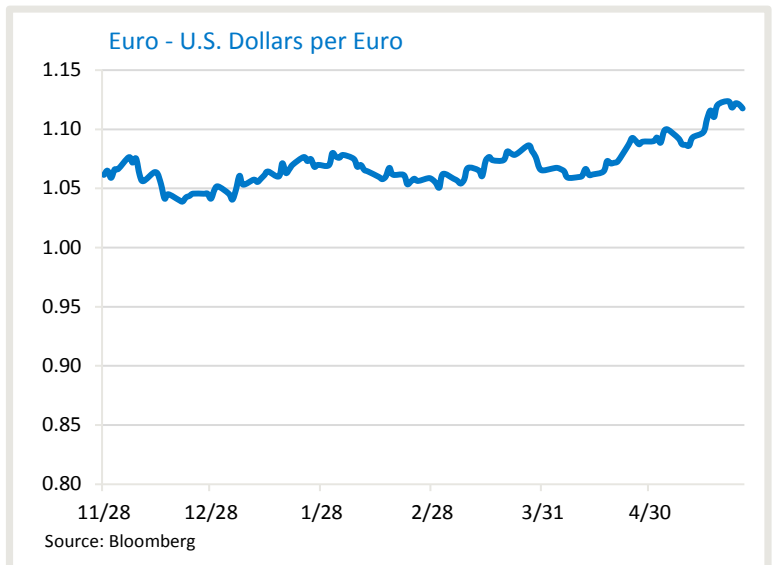
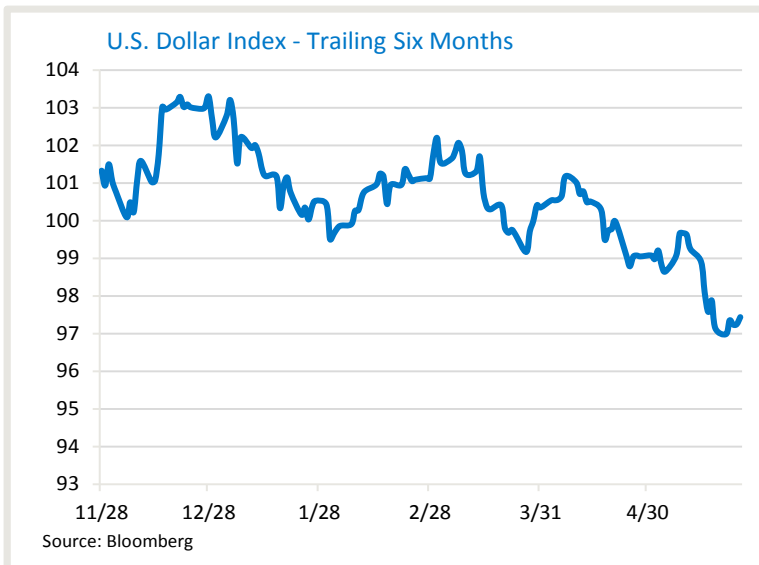
## Currencies

### SELECTED CURRENCY PERFORMANCE

	Last	Change	% Chg.	YTD %
<b>Dollar Index</b>	<b>97.43</b>	<b>0.296</b>	<b>0.30%</b>	<b>-4.67%</b>
<b>Euro</b>	<b>1.12</b>	<b>-0.003</b>	<b>-0.27%</b>	<b>6.27%</b>
<b>Japanese Yen</b>	<b>111.31</b>	<b>0.030</b>	<b>-0.03%</b>	<b>5.09%</b>
<b>British Pound</b>	<b>1.28</b>	<b>-0.023</b>	<b>-1.74%</b>	<b>3.80%</b>
<b>Canadian Dollar</b>	<b>1.35</b>	<b>-0.006</b>	<b>0.45%</b>	<b>-0.07%</b>

	Last	Change	% Chg.	YTD %
<b>Chinese Yuan</b>	<b>6.86</b>	<b>-0.030</b>	<b>0.43%</b>	<b>1.31%</b>
<b>Swiss Franc</b>	<b>0.97</b>	<b>0.002</b>	<b>-0.17%</b>	<b>4.56%</b>
<b>New Zealand Dollar</b>	<b>0.71</b>	<b>0.014</b>	<b>2.02%</b>	<b>1.87%</b>
<b>Brazilian Real</b>	<b>3.26</b>	<b>0.012</b>	<b>-0.35%</b>	<b>-0.46%</b>
<b>Mexican Peso</b>	<b>18.51</b>	<b>-0.210</b>	<b>1.14%</b>	<b>11.93%</b>

Source: Bloomberg



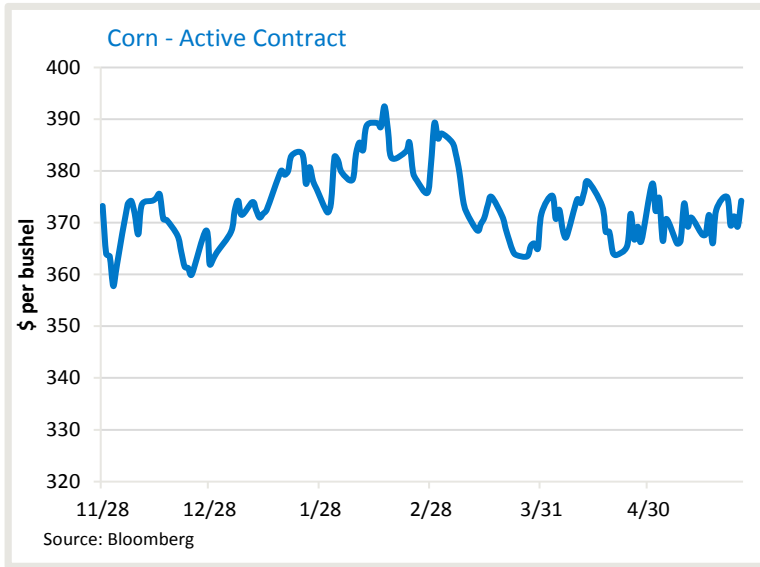
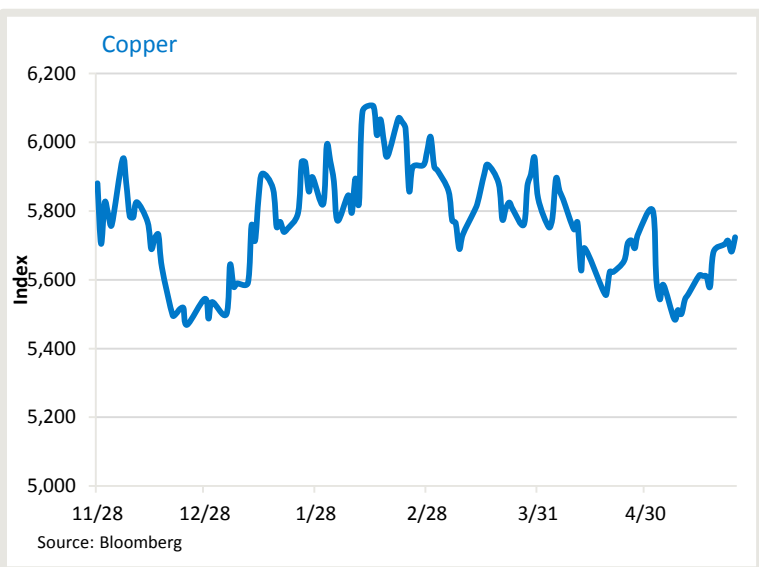
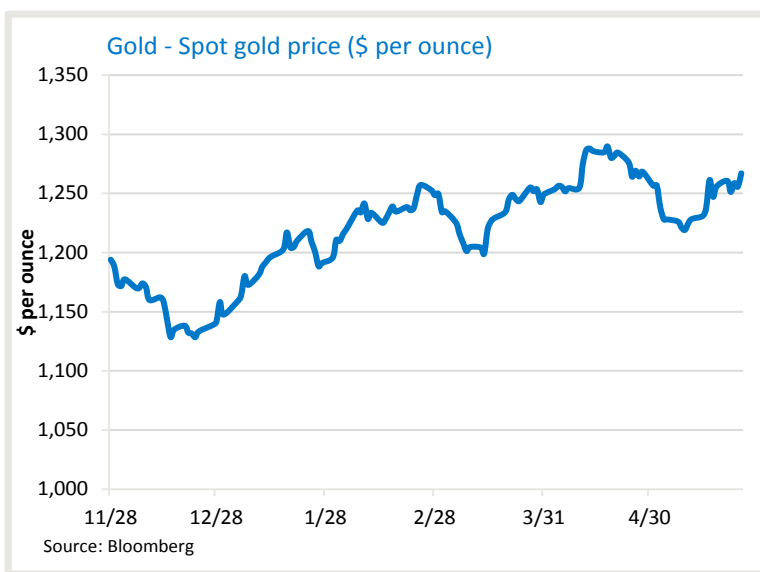
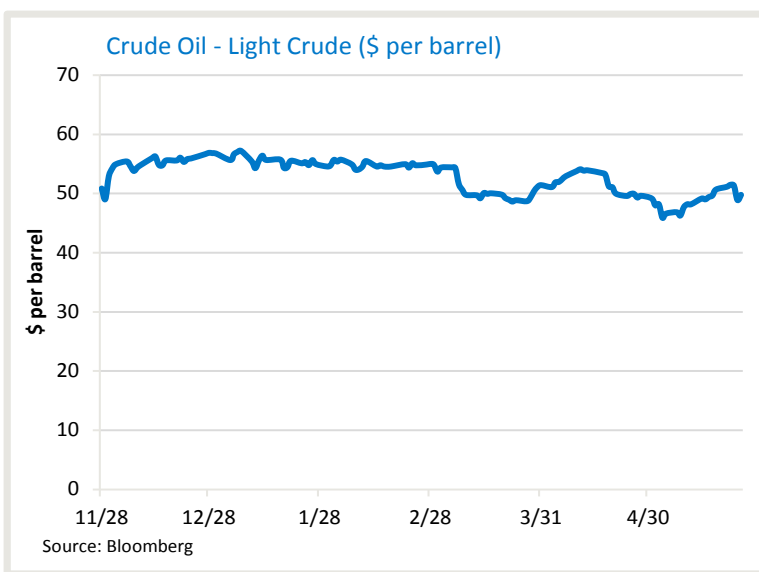
## Commodities

### SELECTED COMMODITY MARKET PERFORMANCE

	Last	Change	% Chg.	YTD %
<b>Bloomberg Comm. Idx.</b>	<b>84.01</b>	<b>-0.71</b>	<b>-0.84%</b>	<b>-4.01%</b>
<b>Crude Oil</b>	<b>\$49.78</b>	<b>-\$0.89</b>	<b>-1.76%</b>	<b>-12.30%</b>
<b>Natural Gas</b>	<b>\$3.29</b>	<b>-\$0.06</b>	<b>-1.64%</b>	<b>-8.03%</b>
<b>Gasoline (\$/Gal.)</b>	<b>\$2.37</b>	<b>\$0.02</b>	<b>0.94%</b>	<b>1.63%</b>
<b>Heating Oil</b>	<b>156.44</b>	<b>-1.83</b>	<b>-1.16%</b>	<b>-10.56%</b>
<b>Gold Spot</b>	<b>\$1,267.08</b>	<b>\$11.08</b>	<b>0.88%</b>	<b>10.41%</b>
<b>Silver Spot</b>	<b>\$17.34</b>	<b>\$0.47</b>	<b>2.81%</b>	<b>8.89%</b>

Source: Bloomberg; % change is based on price.

	Last	Change	% Chg.	YTD %
<b>Platinum Spot</b>	<b>\$959.90</b>	<b>\$20.24</b>	<b>2.15%</b>	<b>6.30%</b>
<b>Corn</b>	<b>374.25</b>	<b>1.75</b>	<b>0.47%</b>	<b>2.75%</b>
<b>Wheat</b>	<b>438.25</b>	<b>3.00</b>	<b>0.69%</b>	<b>0.92%</b>
<b>Soybeans</b>	<b>926.50</b>	<b>-26.50</b>	<b>-2.78%</b>	<b>-9.08%</b>
<b>Sugar</b>	<b>15.05</b>	<b>-1.33</b>	<b>-8.12%</b>	<b>-20.16%</b>
<b>Orange Juice</b>	<b>138.60</b>	<b>-1.15</b>	<b>-0.82%</b>	<b>-27.03%</b>
<b>Aluminum</b>	<b>1,960.00</b>	<b>16.50</b>	<b>0.85%</b>	<b>15.77%</b>
<b>Copper</b>	<b>5,724.00</b>	<b>42.00</b>	<b>0.74%</b>	<b>3.41%</b>

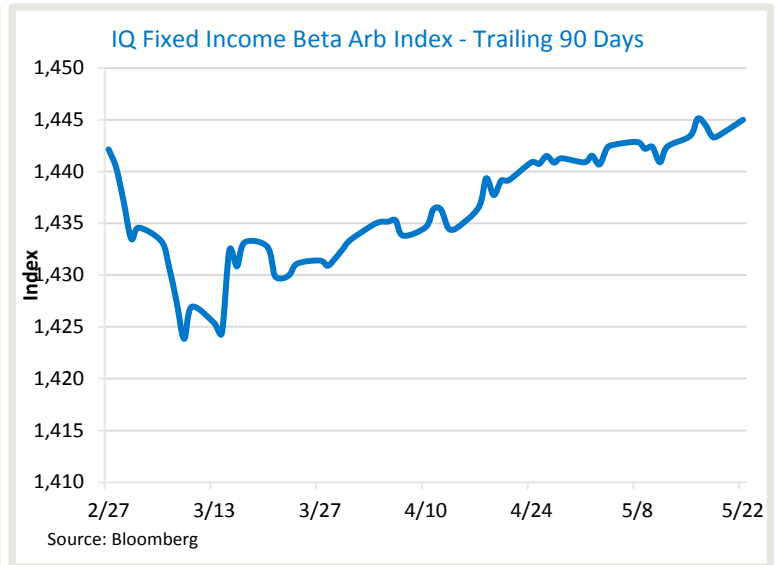
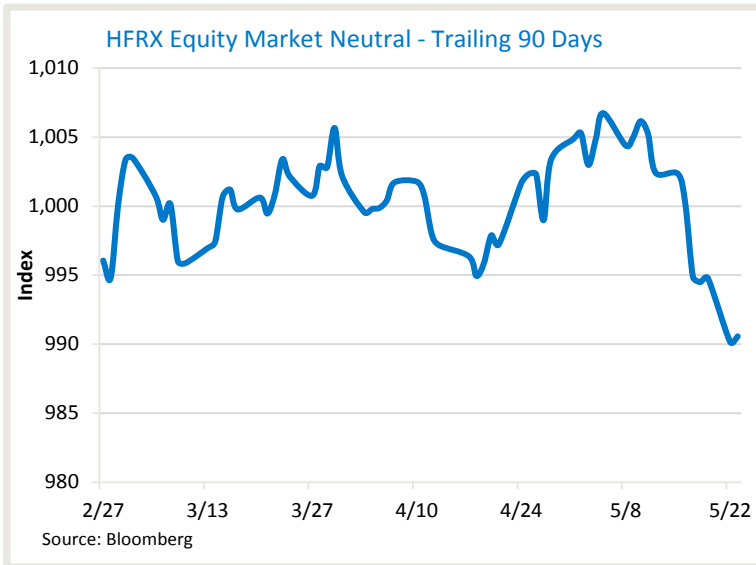
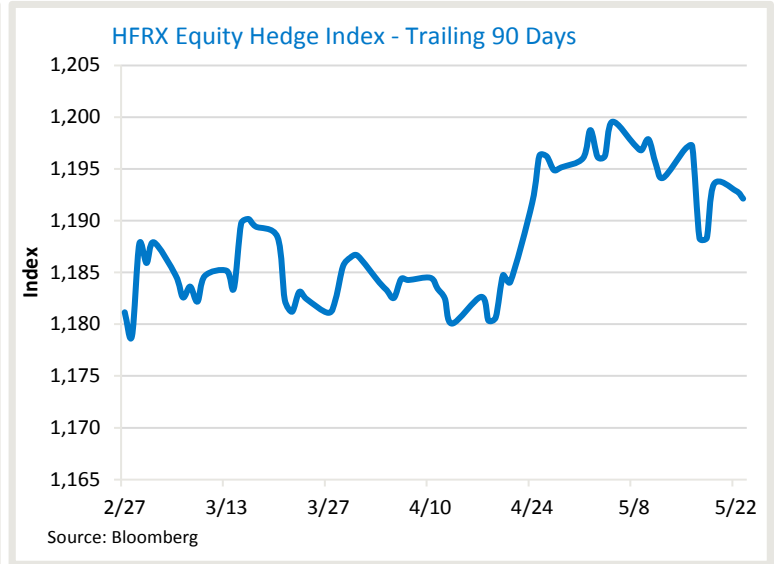
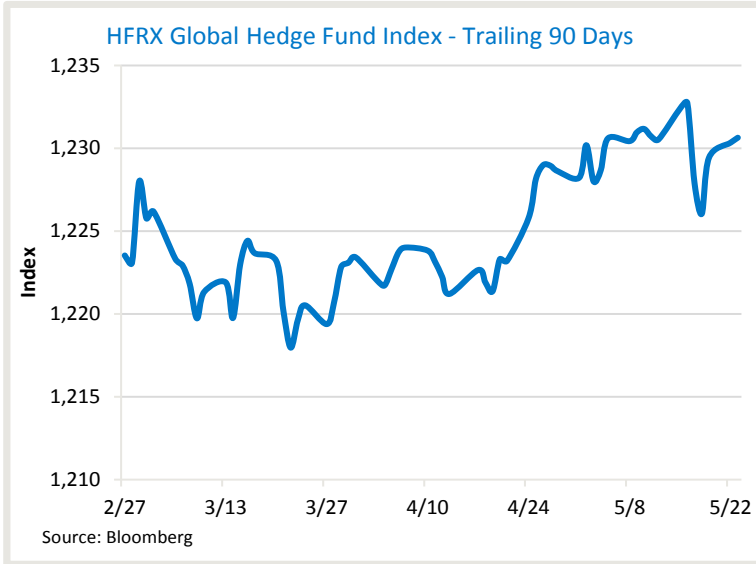


## Alternative Investments

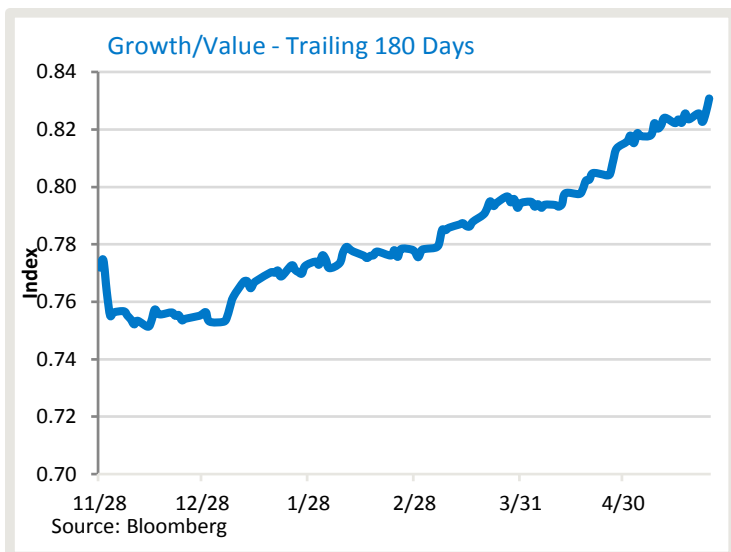
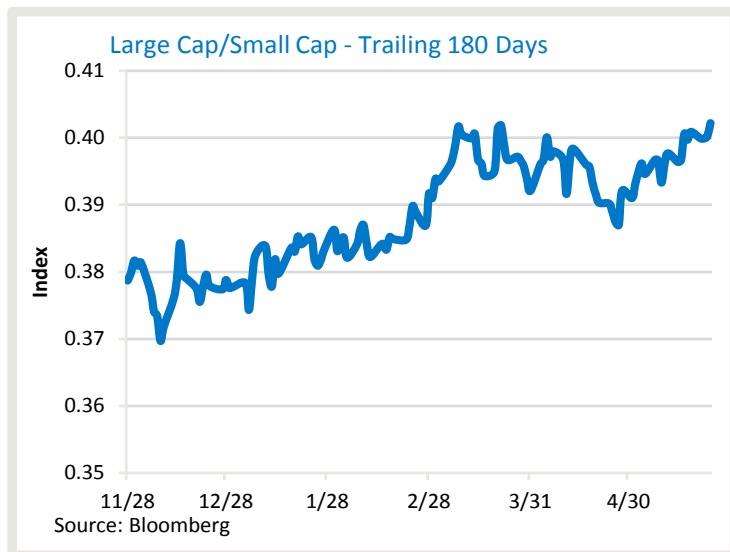
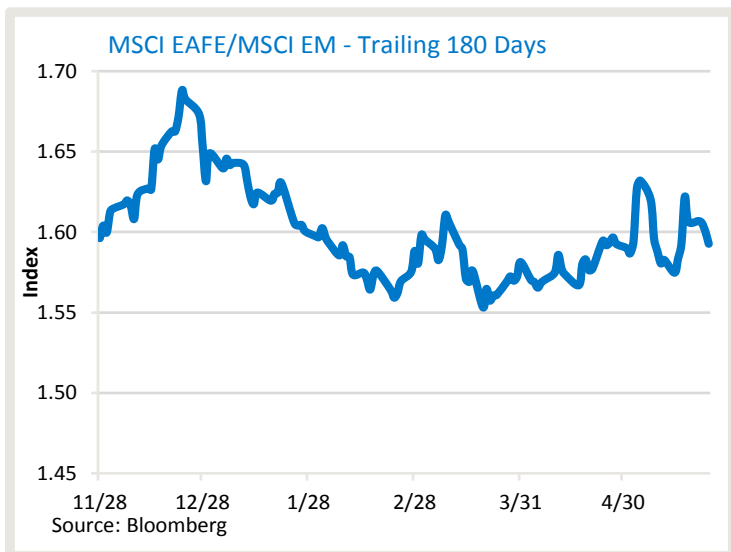
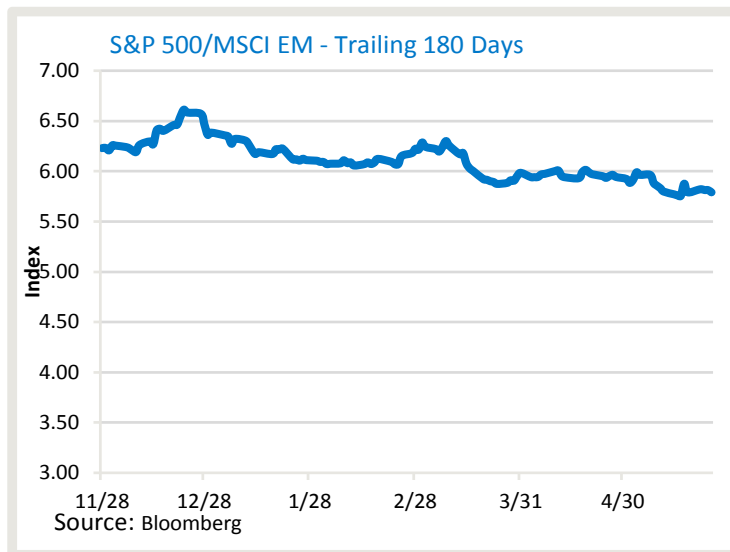
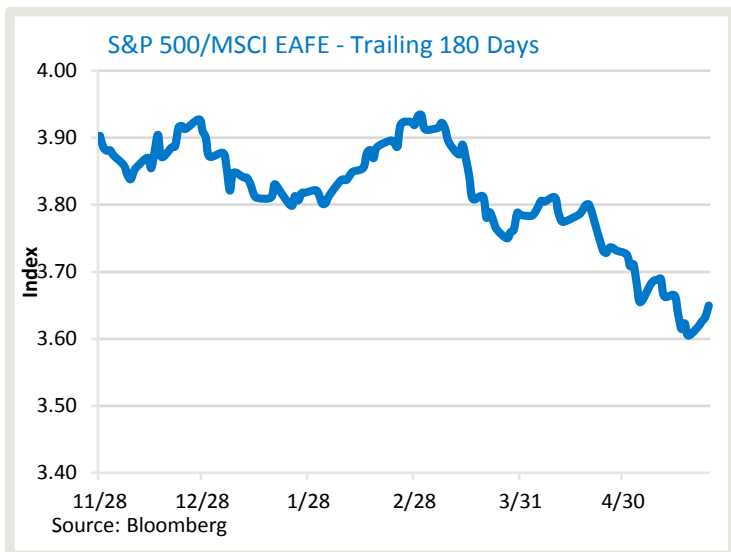
### SELECTED ALTERNATIVE INVESTMENT INDEX PERFORMANCE

	Last	Change	% Chg.	YTD %		Last	Change	% Chg.	YTD %
HFRX Global Hedge Fund Index	1232.86	3.43	0.28%	2.44%	HFRX Distressed Index	1094.61	2.77	0.25%	2.01%
HFRX Equity Market Neutral	988.39	-6.40	-0.64%	0.11%	HFRX Merger Arbitrage Index	1827.40	2.24	0.12%	0.82%
HFRX Equity Hedge Index	1191.46	-2.09	-0.18%	3.12%	HFRX Convertible Arbitrage Index	769.26	1.15	0.15%	3.59%
HFRX Event-Driven Index	1637.55	1.98	0.12%	4.68%	HFRX Macro CTA Index	1130.53	10.22	0.91%	-0.43%
HFRX Absolute Return Index	1040.78	0.76	0.07%	1.20%	IQ Fixed Income Beta Arb Index	1445.41	1.83	0.13%	1.79%

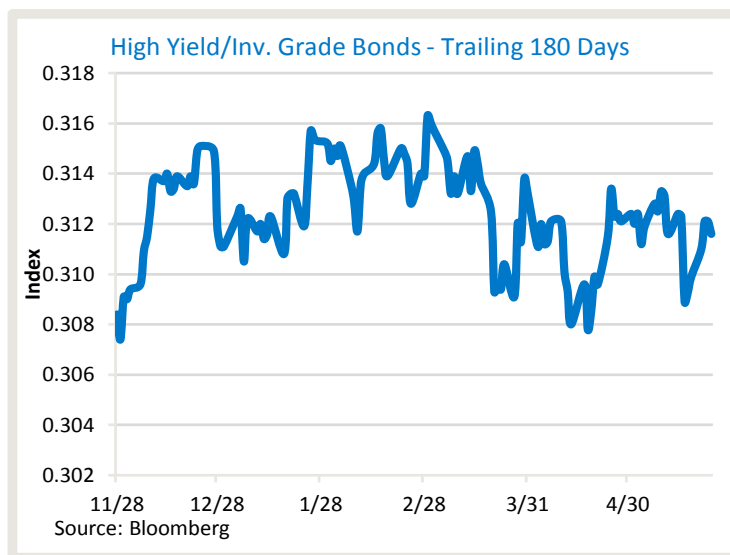
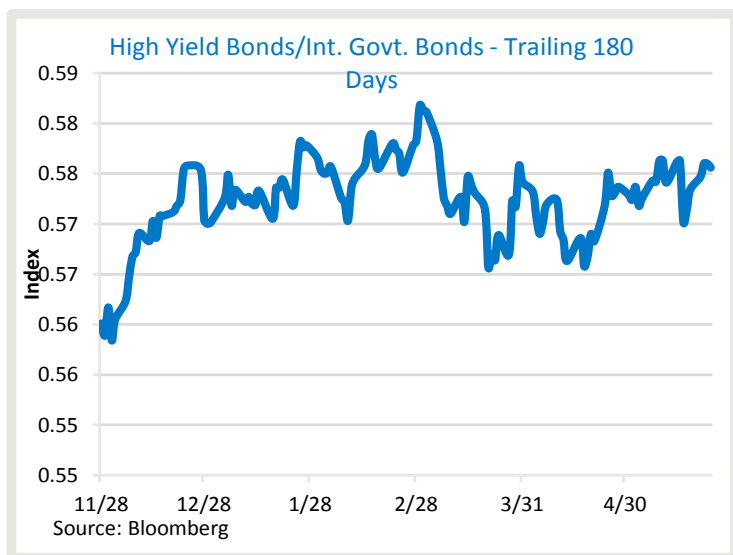
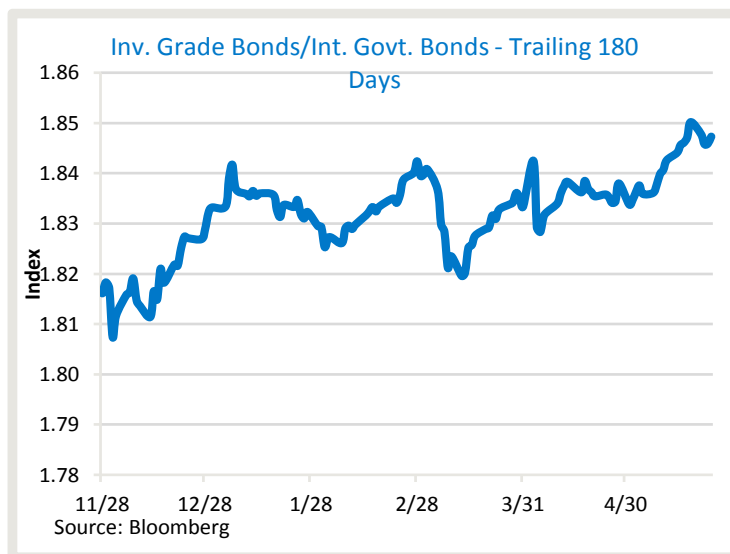
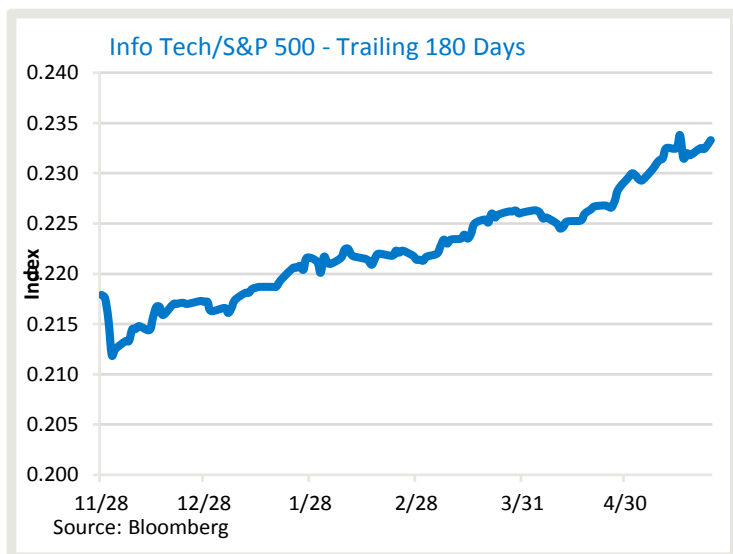
Source: Bloomberg; Index % change is based on price.



## Portfolio Construction



## Portfolio Construction (continued)



WEEKLY ASSET CLASS PERFORMANCE (Prior 12 weeks ending Thursday)

			3/9	3/16	3/23	3/30	4/6	4/13	4/20	4/27	5/4	5/11	5/18	5/25
Equity	Domestic Equity	Large Cap (R200)	-0.48%	0.58%	-1.57%	0.90%	-0.41%	-1.20%	1.01%	1.47%	0.24%	0.08%	-1.17%	2.09%
		Small Cap (R2000)	-2.55%	1.90%	-2.35%	2.14%	-1.30%	-1.41%	2.89%	2.38%	-2.00%	0.10%	-2.09%	1.64%
	Int'l. Equity	MSCI EAFE	-0.60%	2.80%	-0.21%	0.51%	-1.20%	-0.03%	0.21%	2.93%	0.94%	0.28%	0.55%	1.27%
		MSCI Em. Mkts.	-1.43%	4.36%	0.49%	0.16%	-0.64%	-0.05%	-0.46%	2.21%	0.04%	2.07%	-1.20%	2.65%
Fixed Income	BarCap Agg. (AGG)	1.07%	-2.33%	4.11%	-1.56%	17.34%	29.55%	-4.73%	-2.04%	-3.28%	-1.23%	-1.56%	-7.92%	
	High Yield (JNK)	-2.05%	0.85%	-0.71%	1.59%	-0.54%	-0.16%	0.54%	0.62%	-0.81%	0.68%	0.03%	0.59%	
Commodities	Bloomberg Commodity Index	-2.77%	0.35%	-0.33%	0.90%	0.47%	0.64%	-2.15%	-0.98%	-1.68%	1.11%	0.36%	0.34%	
Alternatives	Hedge Funds (HFRX Global)	-0.49%	0.38%	-0.39%	0.28%	0.05%	-0.21%	0.17%	0.46%	-0.02%	0.17%	-0.38%	0.56%	
Asset Allocation	60/40*	-0.29%	0.23%	0.69%	0.07%	5.57%	9.83%	-1.03%	0.54%	-1.17%	-0.22%	-1.08%	-1.63%	
	48/32/20 (w/Alts.)**	-0.33%	0.26%	0.47%	0.11%	4.47%	7.82%	-0.79%	0.53%	-0.94%	-0.14%	-0.94%	-1.19%	

Source: Bloomberg; \*60/40 portfolio = 30% Large Cap/10% Small Cap/15% EAFE/5% Emerging Markets/35% BarCap Agg./5% High Yield.

\*\*48/32/20 portfolio = 24% Large Cap/8% Small Cap/12% EAFE/4% Emerging Markets/28% BarCap Agg./4% High Yield/20% HFRX Global Index.

RELATIVE STRENGTH MATRIX (BASED ON 30-DAY RSI)

	Large Cap Core	Large Cap Growth	Large Cap Value	Mid Cap Core	Mid Cap Growth	Mid Cap Value	Small Cap Core	Small Cap Growth	Small Cap Value	Int'l. Developed	Emerging Markets	REITs	Comm.	Int. Bond	High Yield
Large Cap Core	1.00	0.89	1.19	1.08	1.00	1.17	1.19	1.12	1.28	0.91	0.95	1.11	1.32	1.26	1.05
Large Cap Growth	1.12	1.00	1.34	1.21	1.12	1.31	1.34	1.25	1.43	1.01	1.06	1.24	1.48	1.41	1.17
Large Cap Value	0.84	0.75	1.00	0.90	0.84	0.98	1.00	0.94	1.07	0.76	0.80	0.93	1.11	1.05	0.88
Mid Cap Core	0.93	0.83	1.11	1.00	0.93	1.09	1.11	1.04	1.18	0.84	0.88	1.03	1.22	1.17	0.97
Mid Cap Growth	1.00	0.89	1.19	1.08	1.00	1.17	1.20	1.12	1.28	0.91	0.95	1.11	1.32	1.26	1.05
Mid Cap Value	0.85	0.76	1.02	0.92	0.85	1.00	1.02	0.95	1.09	0.77	0.81	0.94	1.12	1.07	0.89
Small Cap Core	0.84	0.75	1.00	0.90	0.84	0.98	1.00	0.94	1.07	0.76	0.80	0.93	1.10	1.05	0.88
Small Cap Growth	0.89	0.80	1.07	0.96	0.89	1.05	1.07	1.00	1.14	0.81	0.85	0.99	1.18	1.12	0.94
Small Cap Value	0.78	0.70	0.94	0.84	0.78	0.92	0.94	0.88	1.00	0.71	0.74	0.87	1.03	0.99	0.82
Int'l. Developed	1.10	0.99	1.32	1.19	1.10	1.29	1.32	1.23	1.41	1.00	1.05	1.22	1.45	1.39	1.16
Emerging Markets	1.05	0.94	1.26	1.13	1.05	1.23	1.26	1.18	1.34	0.95	1.00	1.16	1.39	1.32	1.10
REITs	0.90	0.81	1.08	0.97	0.90	1.06	1.08	1.01	1.15	0.82	0.86	1.00	1.19	1.14	0.95
Commodities	0.76	0.68	0.90	0.82	0.76	0.89	0.91	0.85	0.97	0.69	0.72	0.84	1.00	0.95	0.80
Int. Bond	0.80	0.71	0.95	0.86	0.80	0.93	0.95	0.89	1.01	0.72	0.76	0.88	1.05	1.00	0.83
High Yield	0.95	0.85	1.14	1.03	0.95	1.12	1.14	1.07	1.22	0.86	0.91	1.05	1.26	1.20	1.00

Source: Bloomberg

The Relative Strength Matrix provides an indication of how the various asset classes have performed relative to one another over the past 30 days. A number greater than 1.0 indicates that the asset class in the far left column has outperformed the corresponding asset class in the top row over the past 30 days. A number below 1.0 means the asset class on the left has underperformed the asset class at the top. The green shading indicates outperformance, and the red shading indicates underperformance.

**Index Overview & Key Definitions**

**Fed, The Fed or FED** refers to the Federal Reserve System, the central bank of the United States. The **Federal Open Market Committee (FOMC)** is the monetary policymaking body of the Federal Reserve System. **Fed Funds Rate**, the interest rate at which a depository institution lends funds maintained at the Federal Reserve to another depository institution overnight. The **European Central Bank (ECB)** is the central bank for Europe's single currency, the euro. The ECB's main task is to maintain the euro's purchasing power and thus price stability in the euro area. The euro area comprises the 19 European Union countries that have introduced the euro since 1999. The **Gross Domestic Product (GDP)** rate is a measurement of the output of goods and services produced by labor and property located in the United States. **Basis Point(s)** is a unit that is equal to 1/100th of 1%, and is used to denote the change in a financial instrument. The basis point is commonly used for calculating changes in interest rates, equity indexes and the yield of a fixed-income security. A **separately managed account (SMA)** is an individual managed investment account offered typically by a brokerage firm through one of their brokers or financial consultants and managed by independent investment management firms (often called money managers for short) and have varying fee structures. The **Consumer Price Index (CPI)** measures the change in the cost of a fixed basket of products and services. The **Producer Price Index (PPI)** program measures the average change over time in the selling prices received by domestic producers for their output. The prices included in the PPI are from the first commercial transaction for many products and some services. **Core CPI** is an additional CPI Index, excludes energy and food item price changes, and measures the "core" or "underlying" rate of inflation. The **PCE (Personal Consumption Expenditure) Index of Prices** is a US--wide indicator of the average increase in prices for all domestic personal consumption. Using a variety of data including U.S. Consumer Price Index and Producer Price Index prices, it is derived from personal consumption expenditures; essentially a measure of goods and services targeted towards individuals and consumed by individuals.

The **Dow Jones Industrial Average (DOW or DJIA)** is an unmanaged index of 30 common stocks comprised of 30 actively traded blue chip stocks, primarily industrials and assumes reinvestment of dividends. The **S&P 500 Index** is an unmanaged index comprised of 500 widely held securities considered to be representative of the stock market in general. The **S&P/Case-Shiller Home Price Indices** measure the residential housing market, tracking changes in the value of the residential real estate market in 20 metropolitan regions across the United States. The **Nasdaq Composite Index** is a stock market index of the common stocks and similar securities listed on the NASDAQ stock market. The **US Dollar Index** is a measure of the value of the United States dollar relative to a basket of foreign currencies. It is a weighted geometric mean of the dollar's value relative to other select currencies (Euro, Japanese yen, Pound sterling, Canadian dollar, Swedish krona (SEK) & Swiss franc). The **Nikkei Index (Nikkei 225 or Nikkei)** is a stock market index for the Tokyo Stock Exchange calculated daily by the Nihon Keizai Shimbun (Nikkei) newspaper since 1950. It is a price-weighted index (the unit is yen), and the components are reviewed once a year. The **FTSE 100 Index (FTSE 100)** is a share index of the 100 companies listed on the London Stock Exchange (LSE) with the highest market capitalization. The **Bloomberg Commodity Index (formerly the Dow Jones-UBS Commodity Index)** tracks prices of futures contracts on physical commodities on the commodity markets and is designed to minimize concentration in any one commodity or sector (currently 22 commodity futures in seven sectors). The **Barclays Capital US Credit Index** is an unmanaged index considered representative of publicly issued, SEC-registered US corporate and specified foreign debentures and secured notes. The **Barclays Capital US Aggregate Bond Index** is a market capitalization-weighted index of investment-grade, fixed-rate debt issues, including government, corporate, asset-backed, and mortgage-backed securities, with maturities of at least one year. The **Barclays Capital US Corporate High Yield Index** covers the USD-denominated, non-investment grade, fixed-rate, taxable corporate bond market. Securities are classified as high-yield if the middle rating of Moody's, Fitch and S&P is Ba1/BB+/BB+ or below. The index may include emerging market debt. The **Barclays Capital Municipal Bond Index** is an unmanaged index comprised of investment-grade, fixed-rate municipal securities representative of the tax-exempt bond market in general. The **Barclays Capital US Treasury Total Return Index** is an unmanaged index of public obligations of the US Treasury with a remaining maturity of one year or more. The **Barclays Capital Global Aggregate ex-U.S. Index** is a market capitalization-weighted index, meaning the securities in the index are weighted according to the market size of each bond type. Most U.S. traded investment grade bonds are represented. Municipal bonds, and Treasury Inflation-Protected Securities are excluded, due to tax treatment issues. The index includes Treasury securities, Government agency bonds, Mortgage-backed bonds, Corporate bonds, and a small amount of foreign bonds traded in U.S. The **Barclays Capital U.S. 5-10 Year Corporate Bond Index** measures the investment return of U.S. dollar denominated, investment-grade, fixed rate, taxable securities issued by industrial, utility, and financial companies with maturities between 5 and 10 years. Treasury securities, mortgage-backed securities (MBS) foreign bonds, government agency bonds and corporate bonds are some of the categories included in the index. The **Barclays Capital U.S. Corporate High-Yield Index** is composed of fixed-rate, publicly issued, non-investment grade debt. The **Barclays Capital U.S. Corporate 5-10 Year Index** includes U.S. dollar-denominated, investment-grade, fixed-rate, taxable securities issued by industrial, utility, & financial companies, with maturities between 5 & 10 years. The **DJ-UBS Commodity Index Total Return SM** measures the collateralized returns from a basket of 19 commodity futures contracts representing the energy, precious metals, industrial metals, grains, softs and livestock sectors. The **Russell 1000 Index** is a market capitalization-weighted benchmark index made up of the 1000 largest U.S. companies in the Russell 3000 Index. The **Russell 1000 Growth Index** is an unmanaged index considered representative of large-cap growth stocks. The **Russell 1000 Value Index** is an unmanaged index considered representative of large-cap value stocks. The **Russell 2000 Index** is an unmanaged index considered representative of small-cap stocks. The **Russell 2000 Growth Index** is an unmanaged index considered representative of small-cap growth stocks. The **Russell 2000 Value Index** is an unmanaged index considered representative of small-cap value stocks. The **Russell 3000 Index** is an unmanaged index considered representative of the US stock market. The **Russell Midcap Index** is a subset of the Russell 1000 Index. It includes approximately 800 of the smallest securities based on a combination of their market cap and current index membership. The **Russell Midcap Growth Index** is an unmanaged index considered representative of mid-cap growth stocks. The **Russell Midcap Value Index** is an unmanaged index considered representative of mid-cap value stocks. The **HFRX Indices** are a series of benchmarks of hedge fund industry performance which are engineered to achieve representative performance of a larger universe of hedge fund strategies. Hedge Fund Research, Inc. employs the HFRX Methodology (UCITS compliant), a proprietary and highly quantitative process by which hedge funds are selected as constituents for the HFRX Indices. The **University of Michigan Consumer Sentiment Index (MCSI)** is a survey of consumer confidence conducted by the University of Michigan using telephone surveys to gather information on consumer expectations regarding the overall economy. The **CBOE Volatility Index (VIX)** is an up-to-the-minute market estimate of expected volatility that is calculated by using real-time S&P 500 Index option bid/ask quotes. The Index uses nearby and second nearby options with at least 8 days left to expiration and then weights them to yield a constant, 30-day measure of the expected volatility of the S&P 500 Index. The **MSCI EAFE Index** is designed to measure the equity market performance of developed markets outside of the U.S. & Canada. The **MSCI EAFE Growth Index** is an unmanaged index considered representative of growth stocks of Europe, Australasia and the Far East. The **MSCI EAFE Value Index** is an unmanaged index considered representative of value stocks of Europe, Australasia and the Far East. The **MSCI EM (Emerging Markets) Latin America Index** is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of emerging markets in Latin America. The **MSCI World ex-U.S. Index** captures large and mid-cap representation across 22 of 23 Developed Markets (DM) countries - excluding the US. With 1,002 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country. The **MSCI Japan Index** is designed to measure the performance of the large and mid-cap segments of the Japanese market. With 320 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in Japan. The **MSCI Emerging Markets Index** is a free float-adjusted market capitalization index that is designed to measure equity market performance in the global emerging markets. The **MSCI Europe Index** is an unmanaged index considered representative of stocks of developed European countries. The **MSCI Pacific Index** is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of the developed markets in the Pacific region. The **Barclays Intermediate US Government/Credit Bond Index** is a market capitalization-weighted index of investment-grade, fixed-rate debt issues, including Treasuries, government-related and U.S. corporate securities, with maturities of at least one year and less than 10 years. The **Philadelphia Fed Manufacturing Index** is a regional Federal Reserve Bank index measuring changes in business growth and is constructed from a survey of participants who voluntarily answer questions regarding the direction of change in their overall business activities. The **ISM Non-Manufacturing Index** is an index based on surveys of more than 400 non-manufacturing firms' purchasing and supply executives, within 60 sectors across the nation, by the Institute of Supply Management (ISM) and also tracks economic data, like the ISM Non-Manufacturing Business Activity Index. A composite diffusion index is created based on the data from these surveys that monitors economic conditions of the nation. The **Housing Market Index (HMI)** is based on a monthly survey of NAHB members designed to take the pulse of the single-family housing market. In May 2007, **Markit's U.S. PMI** research was extended out to cover producers of metal goods. In October 2009, Markit's U.S. Manufacturing PMI survey panel was extended further to cover all areas of U.S. manufacturing activity. The **NY Empire State Index** is an index based on the monthly survey of manufacturers in New York State - known as the Empire State Manufacturing Survey - conducted by the Federal Reserve Bank of New York. The headline number for the NY Empire State Index refers to the survey's main index, which summarizes general business conditions in New York State. The **Industrial Production Index** is an economic indicator that measures real output for all facilities located in the United States manufacturing, mining, and electric, and gas utilities (excluding those in U.S. territories).

The information, analysis, and opinions expressed herein are for general and educational purposes only. Nothing contained in this weekly review is intended to constitute legal, tax, accounting, securities, or investment advice, nor an opinion regarding the appropriateness of any investment, nor a solicitation of any type. All investments carry a certain risk, and there is no assurance that an investment will provide positive performance over any period of time. An investor may experience loss of principal. Investment decisions should always be made based on the investor's specific financial needs and objectives, goals, time horizon, and risk tolerance. The asset classes and/or investment strategies described may not be suitable for all investors and investors should consult with an investment advisor to determine the appropriate investment strategy. Past performance is not indicative of future results.

Information obtained from third party sources are believed to be reliable but not guaranteed. Envestnet|PMC™ makes no representation regarding the accuracy or completeness of information provided herein. All opinions and views constitute our judgments as of the date of writing and are subject to change at any time without notice.

Investments in smaller companies carry greater risk than is customarily associated with larger companies for various reasons such as volatility of earnings and prospects, higher failure rates, and limited markets, product lines or financial resources. Investing overseas involves special risks, including the volatility of currency exchange rates and, in some cases, limited geographic focus, political and economic instability, and relatively illiquid markets. Income (bond) securities are subject to interest rate risk, which is the risk that debt securities in a portfolio will decline in value because of increases in market interest rates.

Exchange Traded Funds (ETFs) are subject to risks similar to those of stocks, such as market risk. Investing in ETFs may bear indirect fees and expenses charged by ETFs in addition to its direct fees and expenses, as well as indirectly bearing the principal risks of those ETFs. ETFs may trade at a discount to their net asset value and are subject to the market fluctuations of their underlying investments. Investing in commodities can be volatile and can suffer from periods of prolonged decline in value and may not be suitable for all investors.

Index Performance is presented for illustrative purposes only and does not represent the performance of any specific investment product or portfolio. An investment cannot be made directly into an index.

Alternative Investments may have complex terms and features that are not easily understood and are not suitable for all investors. You should conduct your own due diligence to ensure you understand the features of the product before investing. Alternative investment strategies may employ a variety of hedging techniques and non-traditional instruments such as inverse and leveraged products. Certain hedging techniques include matched combinations that neutralize or offset individual risks such as merger arbitrage, long/short equity, convertible bond arbitrage and fixed-income arbitrage. Leveraged products are those that employ financial derivatives and debt to try to achieve a multiple (for example two or three times) of the return or inverse return of a stated index or benchmark over the course of a single day. Inverse products utilize short selling, derivatives trading, and other leveraged investment techniques, such as futures trading to achieve their objectives, mainly to track the inverse of their benchmarks. As with all investments, there is no assurance that any investment strategies will achieve their objectives or protect against losses.

Neither Envestnet, Envestnet|PMC™ nor its representatives render tax, accounting or legal advice. Any tax statements contained herein are not intended or written to be used, and cannot be used, for the purpose of avoiding U.S. federal, state, or local tax penalties. Taxpayers should always seek advice based on their own particular circumstances from an independent tax advisor.

© 2017 Envestnet Asset Management, Inc. All rights reserved.

#### **ABOUT ENVESTNET®**

Envestnet, Inc. (NYSE: ENV) is the leading provider of intelligent systems for wealth management and financial wellness. Envestnet's unified technology enhances advisor productivity and strengthens the wealth management process, delivering unparalleled flexibility, accuracy, performance, and value. Envestnet enables a transparent, independent, objective, and fiduciary standard of care, and empowers enterprises and advisors to more fully understand their clients and deliver better outcomes.

For more information on Envestnet, please visit [www.envestnet.com](http://www.envestnet.com).